

## CLAIMS

1. Shoulder prosthesis, including a stem provided to be inserted  
5 into a canal of the humerus shaft (20), a neck (7) and a head (23) supported  
by the neck, characterized therein that the neck (7) is provided  
with at least two holes (1, 2) for anchoring screws (1a, 2a), namely a first  
hole (1) for a lateral anchoring screw (1a) and a second hole (2) for an  
anterior anchoring screw (2a), said lateral anchoring screw being provided to  
10 attach a first tubercle laterally to the neck and said anterior anchoring screw  
being provided to attach a second tubercle anterior to the neck.
2. Shoulder prosthesis according to claim 1,  
characterized therein, that a third hole (16) in the neck (7) is  
15 provided for a posterior anchoring screw (16a) being provided to attach a  
third tubercle posteriorly to the neck of the prosthesis.
3. Shoulder prosthesis according to claim 1,  
characterized therein, that the top end (8) of the prosthetic stem  
20 is tapered.
4. Shoulder prosthesis according to claim 1,  
characterized therein, that a lateral fin (5) and a anterior fin (4)  
project from the neck (7) of the prosthesis, said lateral fin having a shorter  
25 length than the anterior fin, which is angled to point at bicipital groove.
5. System for implanting a shoulder prosthesis,  
characterized in a targeting arm (10) attachable to the neck (7) of  
the prosthesis and provided with guide means (12, 13) for guiding anchoring  
30 screws (1a, 2a) to be screwed into at least a lateral hole (1) and an anterior  
hole (2) in the neck, said targeting arm also being provided for holding the  
trial prosthesis.

6. System according to claim 3, characterized therein, that a further hole (3) is provided in the neck (7) and able to receive an attachment part of the targeting arm (10).

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7. System according to claim 6, characterized therein, that the targeting arm (10) being stabilized by engaging a peg into a hole of anterior fin (4).

10 8. System according to claim 5, characterized therein, that a guide wire (15) is arranged for guiding a posterior screw (16) into place into a third hole (16) in the neck (7) of the prosthesis, said guide wire being inserted from anterior through the recipient hole.

15 9. System according to claim 5 including a trial stem provided with marks (9) for determining the depth of the stem in a canal of the humerus, characterized in a locking ring (14) surrounding the trial stem and resting on the end of the humeral shaft and able to lock the stem to a chosen depth.